REMARKS

Claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22 and 24 are currently pending in the application.

This amendment is in response to the Final Office Action of August 3, 2005.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent 5,972,234 to Weng et al. in view of U.S. Patent 5,855,969 to Robertson

Claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weng et al. (U.S. Patent 5,972,234) in view of Robertson (U.S. Patent 5,855,969). Applicants respectfully traverse this rejection, as hereinafter set forth.

Applicants assert that:

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

Turning to the cited prior art, Weng et al. teaches or suggests a method for marking a semiconductor surface. Weng et al. describe a polymeric tape can be provided that is suitable for ablative photodecomposition. Column 4 lines 25-40. In other words, the mark which is to be formed in the semiconductor surface is first formed as a cavity through the tape using "high-intensity energy beams such as ultraviolet light or laser." Column 4 lines 32-33; *See also* column 2 lines 63-63, column 3 lines 6-11, column 3 lines 22-23, column 3 lines 27-30, column 3 lines 39-40, column 4 lines 52-54. After the mark has been formed *through* the tape, the tape is applied to the semiconductor surface. Column 4 line 57 – column 5 line 7. Finally, the mark is

formed in the semiconductor surface by etching the semiconductor in the area exposed by the mark formed in the tape. The tape protects the rest of the semiconductor surface from the etchant, such that the mark in the tape is patterned into the semiconductor surface. Column 5 lines 8-25. Finally, the tape is removed from the surface of the semiconductor, leaving the mark formed by the etchant. Column 5 lines 27 – 37. The tape has a thickness of about 0.5 mm and can be provided with an adhesive backing or without an adhesive backing. Column 5, lines 38-41. A suitable adhesive may be an acrylic type polymer. Column 4, lines 63,64.

The Robertson reference teaches or suggests the use of a CO_2 laser to darken a coating containing an additive that is darkenable under the action of the laser. Nowhere in the Robertson reference does the word "cure" appear in any description of the additive in the coating.

After carefully considering the cited prior art, the rejections, and the Examiner's comments, Applicants have amended the claimed invention to clearly distinguish over the cited prior art.

Applicants assert that any combination of the cited prior art Weng et al. reference and the Robertson reference fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 because any combination of the cited prior art fails to teach or suggest all the claim limitations and the suggestion to make the claimed combination and the reasonable expectation of success must is found solely in Applicants' disclosure, not the cited prior art.

Applicants assert that any combination of the cited prior art fails to teach or suggest the claim limitations of presently amended independent claims 1, 9, and 17 calling for "a tape comprising a flexible film material having a coefficient of thermal expansion substantially similar to the semiconductor device", "a flexible film material having a coefficient of thermal expansion substantially similar to the semiconductor device", "film material having a coefficient of thermal expansion substantially similar to the semiconductor device", "a first outermost adhesive layer comprising a mixture of electromagnetic radiation-curable components, the electromagnetic radiation-curable components providing a laser-markable surface upon exposure to an electromagnetic radiation source by curing and bonding to at least a portion of a semiconductor device <u>when laser marking a semiconductor device</u>" and "a second adhesive layer disposed between the tape and the first outermost adhesive layer, the second adhesive layer

comprising a mixture of electromagnetic radiation-curable components to radiation the second adhesive layer performs at least one curing onto portions of the first outermost adhesive layer and losing adhesive properties for facilitating peeling of the flexible film material when laser marking a semiconductor device". Applicants assert that, in contrast to the presently claimed inventions of presently amended independent claims 1, 6, and 17, the Weng et al. reference, at best, teaches or suggests a tape having one single adhesive layer, not a tape having multilayer adhesive. Further, Applicants assert that Weng et al. does not teach or suggest using a tape that has laser markable surface. While the Office the Office Action refers to column 2, lines 20-21 of Weng et al. as teaching or suggesting a marking rape form making an identification mark by a high-intensity energy beam, no such invention is either enabled, or described, or taught, or suggested in either the SUMMARY OF THE INVENTION, or the BRIEF DESCRIPTION OF THE DRAWINGS, or the DETAILED DESCRIPTION OF THE PREFERRED AND ALTERNATE EMBODIMENTS of the application, or the claimed inventions of the application in claims 1 through 22 thereof. As such, Applicants assert that any rejection based upon the Weng et al. reference is a hindsight reconstruction of the Applicants inventions based solely upon Applicants' disclosure because Weng et al. contains no such teaching or suggestion. In each instance of the various embodiments of the Weng et al. reference, the semiconductor device is marked using an etchant, not a laser. The claimed inventions of presently amended independent claims 1, 9, and 17 contain the claim limitations for a tape having at least two layers of adhesive thereon. The first layer of adhesive contains the claim limitation calling for "comprising a mixture of electromagnetic radiation-curable components, the electromagnetic radiation-curable components providing a laser-markable surface upon exposure to an electromagnetic radiation source by curing and bonding to at least a portion of a semiconductor device". The second layer of adhesive contains the claim limitation calling for "a mixture of electromagnetic radiation-curable components to radiation the second adhesive layer performs at least one curing onto portions of the first outermost adhesive layer and losing adhesive properties for facilitating peeling of the flexible film material". The second layer of adhesive has different properties from the first layer of adhesive. The different properties of the first layer of adhesive and the second layer of adhesive are clearly distinct from each other as both described in the independent claims

1, 9, and 17 and in Applicants' disclosure. Such properties are set forth in the claimed inventions of presently amended independent claims 1, 9, and 17. In contrast to the claimed inventions, the Weng et al. reference merely teaches or suggests an single layer of adhesive. Furthermore, the Robertson reference merely teaches or suggests a coating having an additive darkenable using a CO_2 laser.

Further, Applicants assert that to include radiation-curable components into any adhesive layer formed in the tape disclosed by Weng et al. would render the invention inoperable. Specifically, applying radiation would *cure* the adhesive layer, which would prevent a pattern from being formed through the tape. Therefore, no mark could be formed through the tape by any ablative photodecomposition process followed by the use of an etchant to form a mark on the semiconductor device if the adhesive layer of the tape were to include radiation-curable components. Applicants respectfully assert that a tape comprising an adhesive layer including radiation-curable components is not "any suitable tape of polymeric based material, which can be easily patterned by high-intensity energy beams such as ultraviolet light or laser" or is not any single layer of adhesive containing "arbitrary or imaginary layers within a single layer". Further, Applicants assert that if the Weng et al. reference is modified as suggested in the Office Action, the teaching or suggestions of the Weng et al. reference are destroyed because in the Weng et al. reference the semiconductor device is marked by an etchant in an etching process which must be eliminated based upon any teaching or suggestion of the Roberson reference. Such a modification is further evidence that any rejection based upon any combination of the Weng et al. reference and the Robertson reference is a hindsight reconstruction of the Applicants' claimed inventions by picking and choosing among the elements of the prior art. Yet further, Applicants assert that since neither the Weng et al. reference nor the Robertson reference contains any suggestion whatsoever for any modification of the Weng et al. reference marking by etching process, any such combination of cited prior art cannot and does not establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the claimed inventions of presently amended independent claims 1, 9, and 17.

Additionally, Applicants assert that the Weng et al. reference merely describes a photodecomposition process employing an excimer type laser for ablating the polymeric based tape. The Weng et al. reference contains no description whatsoever as to how an excimer laser affects the adhesive. Applicants assert that absent any description as to how an excimer laser affects the adhesive used with the tape, any rejection based upon the Weng et al. reference is based solely upon Applicants' disclosure, not the cited prior art.

Yet further, Applicants assert that the sole basis for any rejection under 35 U.S.C. § 103 based upon the cited combination of the prior art is solely Applicants' disclosure. Applicants assert that such is clearly evident by the comments in the Office Action directed to the fact that nowhere in either the Weng et al. reference or the Robertson reference is there any teaching or suggestion for multiple layers of adhesive. Solely the Applicants' disclosure contains any such teaching or suggestion.

Applicants assert that any combination of the cited prior art does not and cannot establish a *prima facie* case of obviousness under 35 U.S.C. § 103 because any combination of the cited prior art fails to teach or suggest all the claim limitations and the suggestion to make the claimed combination and the reasonable expectation of success must is found solely in Applicants' disclosure, not the cited prior art.

Applicants request entry of this amendment for the following reasons:

The amendment places the application in condition for allowance.

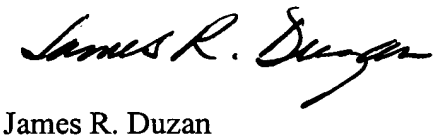
The amendment does not require any further search or consideration.

The amendment is timely filed.

Applicants submit that claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22 and 24 are clearly allowable over the cited prior art.

Applicants request the entry of this amendment, the allowance of claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22 and 24, and the case passed for issue.

Respectfully submitted,



James R. Duzan
Registration No. 28,393
Attorney for Applicant
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

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